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DSC TECHNICAL BULLETIN 04- 02

Subject: Painting Weathered Wood

Discussion:

There is no opaque paint that adheres well to weathered wood. This can be a problem on historic structures, as well as new construction, where unpainted exterior wood has been exposed to the elements—in particular, the sun, for even brief periods of time. However, after a number of NPS projects were treated with a wood stabilizer, prior to painting, we have noticed a significant change, for the better, in the performance of paint on weathered wood. This can mean a significant retention of historic fabric that might otherwise have been removed in favor of new wood that can better retain an exterior paint finish. To our knowledge, the only product that is equal to or better at the task of making weathered or unpainted plywood paintable (stabilized) is manufactured by Pittsburgh Paints. This product is a water-based (modified acrylic latex), so there are no issues with mildew since it contains no linseed oil (reference DSC TECHNICAL BULLETIN 04-03).

Recommendation:

- Apply stabilizer only on unpainted weathered and new wood as a primer: Use a product that
 is equal or better than Pittsburgh Paints, Permanizer Plus Wood Stabilizer, 77-102
 http://www.emeraldpaint.com/files/TDB77-102.pdf
- Do not tint stabilizer
- Do not apply stabilizer over paint.
- Apply only water-based solid color stains and topcoats over stabilized wood.
- Do not apply as a clear coat, must always be top-coated
- Stabilizer not recommended for decks, redwood, cedar or immersion service.
- Avoid priming late in the day or when dew or condensation is likely to form or if rain threatens.

Bruce Warneke, Chief, Technical Branch

Images:



Wood stabilizer applied as a primer to unpainted wood repairs just prior to painting. Plum Orchard Mansion, Cumberland Island National Seashore.